
i.MX6 Series Processor

Android Resource Guide [SBC/EC/NSD2100 Series]



0 Definitions

The term “**Product**” in this document refers to the following products:

- SBC2100 Single Board Computer
- EC21xx Embedded Computer Series
- NSD21xx Smart Display Series

1 Overview

This document provides a guide about what software features are supported in the **Product**. These mainly include the cross toolchain, bootloader, Android and drivers, file system and applications etc.

2 Resource List

Table 1 Hardware Resource

Features	Comment
CPU	Freescale iMX6Q/D ARM Cortex™-A9 (1GHz)
RAM	1 GB
NAND flash (eMMC)	4 GB
Power supply range	DC 9V ~ 36V
Power supply circuit protection	Support
GPU	
- Renderer	GC2000 core
- Version	OpenGL ES 2.0

Table 2 Toolchain

Toolchain Features	Comment
GNU toolchain for ARM Embedded Processors	GCC version 4.6.2

Table 3 Android SDK

SDK Features	Comment
Android SDK API Level 17	Android 4.2 SDK

Table 4 Boot Resource

Features	Status
Boot from eMMC	Support
Boot from microSD	Support
USB-OTG download	Support

Table 5 Output Resource

Features	Status
TTL driver	
- 7" (800 x 480)	Support
LVDS driver	
- 7" (1024 x 600)	Support
- 10.1" (1024 x 600)	Support
- 15" (1024 x 768)	Support

Dual LVDS driver	
- 21.5" (1920 x 1080)	Support
HDMI driver	Support
Touch screen driver	
- Resistive touch panel (7" / 10.1" / 15")	Support
- Capacitive touch panel (7" / 10.1")	Support

Table 6 Android Resource

Features	Android 4.2.2 Linux 3.0.35
➤ Device Drivers	
USB host driver	
- Mass storage class	Support
- HID class	Support
USB-OTG device driver	
- USB mass storage device driver	Support
- USB ADB driver	Support
microSD driver (support size greater than 8GB*)	Support
Audio driver	
- ALSA driver	Version 1.0.24
- Head phone	Support
- MIC	Support
- Speaker	Support
SATA 2 driver	Support
Ethernet MAC driver	Support
Wi-Fi driver	
- RTL8188 Wi-Fi driver (USB interface)	Support
- RTL8723 Wi-Fi & Bluetooth driver (USB interface)	Support
3G driver	
- HUAWEI EM820W HSPA+ module (Mini PCI-e interface)	Support
Standard serial driver	
- console	Support
- RS232	Support
- RS485	Support
Camera	

* The highest capacity we verified.

- USB webcam	Support
CAN Bus driver	Support
I ² C Bus driver	Support
GPIO driver	Support
RTC driver	Support
SPI driver	Support
➤ File System	
ext2 / ext3 / ext4	Support
vFAT	Support
➤ Video Codec	
MPEG-1	
- MPG	Support
MPEG-2	
- MPG	Support
- TS	Support
- VOB	Support
MPEG-4	
- MP4	Support
- MOV	Support
H.264	
- AVI	Support
- MKV	Support
- MOV	Support
- MP4	Support
- FLV	Support
➤ Image Codec	
BMP	Support
GIF	Support
JPEG	Support
PNG	Support
➤ Audio Codec	
AAC	Support
FLAC	Support
M4A	Support
MIDI	Support
MKA	Support

MP2	Support
MP3	Support
OGG	Support
WAV	Support